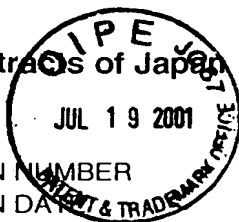


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APPLICANT : MITSUBISHI PENCIL CO LTD;

INVENTOR : SAKURAI KIYOKAZU;

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TITLE : WATER-BASE INK COMPOSITION FOR WRITING UTENSIL

ABSTRACT : PROBLEM TO BE SOLVED: To obtain a water-base dispersion which is used as an ink base and is stable during storage without causing precipitation and an ink compsn. excellent in resistances to water and light by dissolving a water-soluble dye in a specific emulsion polymn. liq. and thermally treating the resultant soln.

SOLUTION: An emulsion polymn. liq. is obtd. by subjecting a mixture of at least one hydrophobic monomer (e.g. an acrylic ester such as methyl acrylate, a methacrylic ester, a vinyl ester, an olefin, or styrene), 50wt.% or lower hydrophilic monomer having a hydrophilic grip (e.g. an amino or carboxyl group), and a cross-linker to emulsion polymn. in the presence of a polymn. initiator and 0.1-20wt.% (based on the vinyl monomers) polymerizable surfactant comprising a compd. having a surface (interface)-active vinyl group. A water-soluble dye in an amt. of 0.2-50wt.% of the solids in the polymn. liq. is dissolved in it and the resultant soln. is heated at 50-150°C for 1-12hr under pressure to give a water-base dispersion of colored resin particles. The dispersion is diluted with water and a water-soluble org. solvent to give an ink compsn. for writing utensils.

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